UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,212	06/27/2003	Didier Poirot	15437-0628	7312

45657 7590 06/18/2007

HICKMAN PALERMO TRUONG & BECKER, LLP
AND SUN MICROSYSTEMS, INC.
2055 GATEWAY PLACE
SUITE 550
SAN JOSE, CA 95110-1089

EXAMINER	
HOSSAIN, TANIM M	

ART UNIT	PAPER NUMBER
2145	

MAIL DATE	DELIVERY MODE
06/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/609,212	POIROT, ET AL.	
	Examiner	Art Unit	
	Tanim Hossain	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/13/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamichi (U.S. 2002/0085498).

As per claim 1, Nakamichi teaches a method of managing a distributed computer system, comprising a plurality of nodes coupled to a switch, said method comprising: receiving status of a link (paragraphs 0041, 0050, 0057, 0110); responsive to said status meeting a condition, receiving a node identifier from said switch for a node coupled to said link (0067, 0071, 0111, 0114); and maintaining a table of data groups comprising link identifiers and node identifiers of nodes coupled to links of said switch (0054, 0055, 0132). Nakamichi teaches the identification of links, but does not specifically teach the per se identification of ports. In view of identifying links, the inclusion of identifying ports would have been obvious to one of ordinary skill in the art at the time of the invention, as in routing, the bookkeeping of port information is well known. The motivation for its inclusion lies in the fact that having port identification per se would allow for an additional method with which to identify the entities in the connection between nodes, allowing for increased flexibility of the invention.

As per claim 2, Nakamichi further teaches requesting agent code of said switch for port status (0013).

As per claim 3, Nakamichi further teaches that responsive to said status meeting a condition, requesting said agent code for identifiers of nodes connected to said port (0054, 0055, 0132).

As per claim 4, Nakamichi further teaches that responsive to said status meeting a condition, requesting agent code of said switch for identifiers of nodes connected to said port (0054, 0055, 0132).

As per claim 5, Nakamichi teaches the method of claim 1, and whether the link is overloaded, for example, but does not specifically teach that the port status indicates that the port is up or down. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the specific indication that whether the port is functioning or not. The motivation for doing so lies in the fact that adding the specific indication would allow for a definitive indication that a certain link is non-functional and useless at the time, rather than simply indicating its overload, which would allow for a more user-friendly format, such that the indication is more concrete.

As per claims 6 and 7, Nakamichi further teaches that when the status of the port is up, the node identifier is known or unknown (0054, 0055, 0132).

As per claim 8, Nakamichi further teaches receiving a message from the switch indicating a new port status (0041); and responsive to the status meeting the given condition, requesting agent code of the switch for the identifier of the node connected to said port (0067, 0071, 0111, 0114). Nakamichi does not specifically teach that if the port status is down,

invalidating a data group in the table having the same port identifier. Nakamichi does teach the indication that a link is overloaded in the table. In view of this, it would have been obvious to extend this teaching to specifically invalidating a port group, such that the system specifically invalidates a corresponding group, rather than simply indicating its overload. The motivation for doing so lies in the fact that specifically invalidating the port group would allow for a more user-friendly interface, such that a definitive indication would take place.

As per claim 9, Nakamichi further teaches comparing the node identifier received with the node identifier in the table for said port, and responsive to a difference between the received node identifier and the node identifier in the table, updating the node identifier associated with the port identifier in the table for the said port (0054, 0055, 0067, 0071, 0111, 0114, 0132).

As per claim 10, Nakamichi teaches the method of claim 1, but does not specifically teach that the port identifier is a port number. It would have been obvious to one of ordinary skill in the art at the time of the invention to include that the port identifier is a port number, as this inclusion is well known in the art of port identification.

As per claim 11, Nakamichi further teaches that the data groups in the table comprise the time of the storage of the port and the node identifiers (0067, 0071, 0111, 0114).

As per claim 12, Nakamichi further teaches that the steps of claim 1 are repeated regularly to request a node identifier connected to a port identifier and to update the table (0067, 0071, 0111, 0114).

As per claim 13, Nakamichi teaches a distributed computer system comprising: a switch having ports and comprising agent code operable to report status of said ports and to identify a node coupled to ones of said ports (paragraphs 0041, 0050, 0057, 0110); and a node coupled to

said switch and comprising manager code operable to: retrieve from said switch, status of a port of said switch (0067, 0071, 0111, 0114); request, from said switch, an identifier of a node coupled to said port of said switch in response to status for said port meeting a condition (0067, 0071, 0111, 0114); and maintain a table of data groups comprising port identifiers and identifiers of nodes coupled to said ports (0054, 0055, 0132).

As per claim 14, Nakamichi further teaches that the manager code is further operable to request the agent code for status of said ports and, responsive to said status meeting a given condition, request the agent code for identifiers of the node connected to said ports (0054, 0055, 0132).

As per claim 15, Nakamichi further teaches that the status of a port indicates that the port is up or down (0054, 0055, 0132; on the basis of obviousness set forth in the treatment of claim 5).

As per claim 16, Nakamichi further teaches that the status of a port indicates, when the port is up, that the node identifier is known or unknown (0054, 0055, 0132).

As per claim 17, Nakamichi further teaches that the condition comprises that the port status is up and indicates that the node identifier is known (0054, 0055, 0132).

As per claim 18, Nakamichi further teaches that the agent code is further operable to send a message indicating a new port status (0041); and the manager code is further operable to: if the port status is down, invalidate a data group in the table having the same port identifier (0067, 0071, 0111, 0114); else, responsive to said new port status meeting the condition, request the agent code for the identifier of the node connected to said port (0067, 0071, 0111, 0114).

As per claim 19, Nakamichi further teaches that the manager code is further operable to: compare a received node identifier for a port with a node identifier in the table for said port (0067, 0071, 0111, 0114); and responsive to a difference between the received node identifier and the node identifier in the table, update the node identifier associated with the port identifier in the table for said port (0067, 0071, 0111, 0114).

As per claim 20, Nakamichi teaches the system of claim 13, but does not specifically teach that the port identifier is a port number. It would have been obvious to one of ordinary skill in the art at the time of the invention to include that the port identifier is a port number, as this inclusion is well known in the art of port identification.

As per claim 21, Nakamichi further teaches that the data groups in the table comprise the time for the storage of the port and the node identifiers (0067, 0071, 0111, 0114).

As per claim 22, Nakamichi further teaches that the manager code is further operable to repeatedly request the node identifier of a port identifier (0067, 0071, 0111, 0114).

Claims 23-34 are rejected under Nakamichi on the same bases as claims 1-12 respectively, as the instant claims disclose limitations similar to those of the earlier claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
Art Unit 2145

JASON CARDONE
SUPERVISORY PATENT EXAMINER